

	1/20	
FIG. 1A	1/20	
F.19.17		
SEQ ID NO: 1 Mtub294752	mlrlvvgalllvlafaggyavaacktvtltvdgtamrvttmksrvidive	50
		20
Mtub294752	engfsvddrddlypaagvqvhdadtivlrrsrplqisldghdckgvwtta	100
MtubZ94752	stvdealaqlamtdtapaaasrasrvplsgmalpvvsaktvqlndgglvr	かい
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Mtub294752	tvhlpapnvagllsaagvpllqsdhvvpaatapivegmgigvtrnrikkv	200
SEQ ID NO: 2 MtubMTV008	mpvgwlwrartakgttlknarttliaaaiagt	32
	mp v 4 n 1 n 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2	32
SEQ ID NO: 3 Mlepl04666	msesyrkl	8
SEQ ID NO: 4 MtubMTV043	msqrhrkpt	9
Mtub294752	terlplppnarrvedpemnmsrevvedpgvpgtqdvtfavaevngvetgr	250
SEQ_ID_NO: 36 Mlut296935	mtlfttsat	9
SEO ID NO: 5 MepL01095	mpqemldvrklc	12
SEGID NO: 6 MtubU38939	mhplpadhgrsrcnrhpisplslignisatsqdmssmt	38
SEQ ID NO: 7 Mtub281368/	mtpqllttagagrprdrca	19
MtubMTV008	lvttspagianaddagldpnaaagpdavgfdpnlppapdaapvdtppape	82
- Company		
SE@ ID NO: 8 Scoeli6C12\$	irtaavtlvaatalgatgeavaapsaplrtDWDAIAACESSGNWQAN	25
Mlep104666	ttssiivakitftgamldgsialagqaspatdsEWDQVARCESGGNWSIN	58
M+11DMTV043	tsnvsvakiaftgavlggggiamaaqataatdgEWDQVARCESGGNWSIN	59
mtubz94752	lpvanvvvtpaheavvrvgtkpgtevppvidgsIWDAIAGCEAGGNWAIN	300
1=f	rsrratasivagmtlagaaavgfsapaqaatvdTWDRLAECESNGTWDIN	59
MlepL01095	klfvksavvsgivtasmalststgmanavprePNWDAVAQCESGRNWRAN	62
MtubU38939	riakpliksamaaglvtasmslstavahagpsPNWDAVAQCESGGNWAAN	88
MtubZ81368	rivctvfietavvatmfvallglstisskaddIDWDAIAQCESGGNWAAN	69
MIUEZ96935 MlepL01095 MtubU38939 MtubZ81368 MtubMTV008	dagfdpnlppplapdflsppaeeappvpvaysVNWDAIAQCESGGNWSIN	132
m MCubhi voo	***** ***** *	
		•
Scoeli6C12\$	TGNGYYGGLQFARSSWIAAGGLKYAPRADLATRGEQIAVAERLARLQGMS	75
Mlep104666	TGNGYLGGLQFSQGTWASHGGGEYAPSAQLATREQQIAVAERVLATQGSG	108
MtubMTV043	TGNGYLGGLQFTQSTWAAHGGGEFAPSAQLASREQQIAVGERVLATQGRG	109
MtubZ94752	TGNGYYGGVQFDQGTWEANGGLRYAPRADLATREEQIAVAEVTRLRQGWG	350
MlutZ96935	TGNGFYGGVQFTLSSWQAVGGEGYPHQASKAEQIKRAEILQDLQGWG	106
MlepL01095	TGNGFYGGLQFKPTIWARYGGVGNPAGASREQQITVANRVLADQGLD	109
MtubU38939	TGNGKYGGLQFKPATWAAFGGVGNPAAASREQQIAVANRVLAEQGLD	135
Mtubz81368	TGNGLYGGLQISQATWDSNGGVGSPAAASPQQQIEVADNIMKTQGPG	116
MtubMTV008	TGNGYYGGLEFTAGTWRANGGSGSAANASREEQIRVAENVLRSQGIR	179
MCUDMI 4008	**** ***** * * * * * ***** *** *** ***	
Scoeli6C12\$	AW	78
Mlep104666	AWPACGHGLSGPSLQEVLPAGMGAPWINGAPAPLAPPPPAEPAP	152
MtubMTV043	AWPVCGRGLSNATPREVLPASaaMDAPldaaaVNGEPAPLA-PPPADPAP	158
MtubZ94752	AWPVCAaragar	362
MlutZ96935	AWPLCSQKLgltqadadagdvdateaapvavertatvqrqsaadeaaaeq	156
MlepL01095	AWPKCGAASDLPITLWSHPAQGVKQIINDIIqmqdttlaaialngl	722
MtubU38939	AWPTCGAASGLPIALWSKPAQGIKQIINEIIwagigasipr	176
Mtubz81368	AWPKCSscsqgdaplgslthiltflaaetggcsgsrdd	154
MtubMTV008	AHPVCGrrg	188
	*** *	



FIG. 1A (CONT.)

Mlepl04666 MtubMTV043 MlutZ96935	pqppadnfpptpgDVPSPLarppvelaandlpaplgeplpaapadpappadlaPPAPADVAPPVelavndlpaaaaeqavvaeaetivvksgdslwtlaneyeveggwtalyeankgavsda	174 208 206
MtubMTV043 MlutZ96935	aplgeplpaapadpappadlappapadlappapadlappvelaviyvgqelvlpqa	258 220
MtubMTV043	avndlpaplgeplpaapaelappadlapasadlappapadlappapaela	308
MtubMTV043	ppapadlappaavneqtapgdqpatapggpvglatdlelpepdpqpadap	358
MtubMTV043	ppgdvteapaetpqvsniaytkklwqairaqdvcgndaldslaqpyvig-	407

82 39	11 163	1 22 1 1 23 1	202	175 326 282 220	362 256 406 286 49		•	09,
mgeregrvdslldtlynlseekeaffitgkmkklfsvklsKSKVILVAACLLLAGSGTAYAAHELTKQSVSVSINGKKKHIR		THANTVGDLLETLDIKIRDEDATIFAKEINTERNETATARASRPLQISLDGHDAKQVWTTASTVDEALAQLAMTDIAFAAAS TMKSRVIDIVEENGFSVDDRDDLYPAAGVQVHDADTIVLRRSRPLQISLDGHDAKQVWTTASTVDEALAQLAMTDIAFAAAS TMKSRVIDIVEENGFSVDDRDDLYPAAGVQVHDADTIVLRRSRPLQISLDGHDAKQVWTTASTVDEALAQLAMTDIAFAAAAS TMKSRVIDIVEENGFSVDDRDDLYPAAGVQVHDADTIVLRSRPLQISLDGHDAKQVWTTASTVDEALAQLAMTDIAFAAAAS TMKSRVIDIVEENGFSVDDRDDLYPAAGVQVHDADTIVLRSRPLQISLDGHDAKQVWTTASTVDEALAQLAMTDIAFAAAAS	aalsttafgahasakeitvqkgdtlwgisqkngvnlkdlkewnkltsdkiiagekltisseettttggytikagdtlskiag paidtdiskDakltuggkAD-ITITRIEKVTD paidtdiskDmkiniePaFQVTvNDAGKQKKIWTTSTTVADFLKQQKMNIKDEDKIKPALDAKLTKGKAD-ITITRIEKVTD RASRVPLSG-MALPVVSAKTVQLNDGGLVRTVHLPAPNVAGLLSAAGVPLLQSDHVVPAATAPIVEGMQIQVTRNNRIKKVTE RASRVPLSG-MALPVVSAKTVQLNDGGLVRTVHLPAPNVAGLLSAAGVPLLGSDHVVPAATAPIVKNMKISITRVNSQIT PALDTNLKNGDKIYIKKAISVEVAVDGKVRRVKSSEETVSKMLKAEKIPLSKVDKVNISRNNAIKKNMKISITRVNSQIT * * * * * * * * * * * * * * * * * * *	# #	aiagceaggnwaintgngyyggvqfdqgtwea KAVQSNTNNQEASKELTVTATAYTANDGGISG KTVVSRSNE-STGKVMTVSSTAYTASCSGCSG	AEAYTASGMHVLRDPNGYSTIAVDFSVIELGIALIAGES	GAIKGNKIDVFVPEKSSAYRWGNKTVKILN 288 SAIKGNKIDVFFPSKSDASNWGVKTVSVKVLN 438 GAIKGNRLDLFFTSERECYDWGAKNVTVYILK 318 GAIKGNRLDLFFTSEREASNWGVRNLDVYILN 81 ************************************	
YabEBsubt	Mtub294752 YocHBsubt	YabEBsubt MtubZ94752 Caceto506	yocHBsubt YabEBsubt Mtub294752 Caceto506	yocilbsubt YabEBsubt Mtub294752 Caceto506	Mtub294752 yocHBsubt YabEBsubt	Cacetosuo Cperfring	Yocilbsubt YabEBsubt Caceto506 Cperfring	
SEQ ID NO:9 A	SEQ ID NO: 1 A	A SEO ID NO: 11 A	E & & &	4444 O	2/5	B SEQ ID NO: 12 B	A 1	511





F14.1C

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LAGKFYG	3755
TYTVKKGDTLWDIAGRFYGNSTQWRKIWNANKTAMIKRSKRNIRQPGHWIFPGQKLKIPQ-	873
TYTVKSGDTLWGISQR-YGISVAQIQSANNLKSTIIYIGQKLLL	216
SVKVKSGDTLWALSVK-YKTSIAQLKSWNHLSSDTIYIGQNLIVSQS	7292
1	31
TYTVKSGDTIWALSSK-YGTSVQNIMSWNNLSSSSIYVGQVLAVKQ-	725
KYTVKSGDSLWKIANN-INLTVQQIRNINNLKSDVLYVGQVLKL	5145
TYTVKSGDSLWVIAQK-FNVTAQQIREKNNLKTDVLQVGQKLVI	5145
TIKVKSGDSLWKLAQT-YNTSVAAL'FSANILSTTVLSIGQTLTIP	5145
TIKVKSGDSLWKLSRQ-YDTTISALKSENKLKSTVLYVGQSLKVPES	657
TIVVKSGDSLWTLANE-YEVEGGWTALYEANKGAVSDAAVIYVGQELVLPQA	

SEQ ID NO: 13 SEQ ID NO: 14 SEQ ID NO: 15 SEQ ID NO: 16 SEQ ID NO: 18 SEQ ID NO: 20 SEQ ID NO: 21 SEQ ID NO: 22 SEQ ID NO: 23 SE





SEQ ID NO: 4 1 msgrhrkpttsnvsvakiaftgavlggggiamaaqataatdgewdqvarcesggnwsintgngylgg lqftqstwaahgggefapsaqlasreqqiavgervlatqgrgawpvcgrglsnatprevlpasaamd apldaaavngepaplapppadp 156

157 appvelaandlpaplgeplpaapadpappadlappapadv 196

197 appvelavndlpaplgeplpaapadpappadlappapadlappapadlappapadl 252

253 appvelavndlpaplgeplpaapaelappadlap-asadlappapadlappapaelappapadlappa

320 ----avne 323

324 qtapgdqpatapggpvglatdlelpepdpqpadapppgdvteapaetpqvsniaytkklwqaira

389 qdvcgndaldslaqpyvig* 407

	Motif		sequence					
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	A B' C D D	208	197 appvelavndl paplgeplpaapad 222 pappadl 229 appapadl 237 appapadl 245 appapadl	221 228 236 244	SEQ SEQ SEQ	ID ID ID	NO: NO: NO:	28 29 30 30
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	41		320 avne	223				

A = appvela[av]ndl

B = paplgeplpaapa[de]1

F14.1D

C = pappadl

D = appapa[de][lv]



72	144	216 184	283 220	355	42 <i>7</i> 220	478 220
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SEQ ID NO:34 Lmonocytog SEQ ID NO: 36 MlutFactor	Lmonocytog MlutFactor	Lmonocytog MlutFactor	Lmonocytog Mlutfactor	Lmonocytog MlutFactor	Lmonocytog MlutFactor	Lmonocytog Mlutfactor





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SEQ ID NO: 43 1 ATVDTWDRLA ECESNGTWDI NTGNGFYGGV QFTLSSWQAV GGEGYPHQAS KAEQIKRAEI 60 61 LQDLQGWGAW PLCSQKLGLT QADADAGDVD ATEAAPVAVE RTATVQRQSA ADEAAAEQAA 120 121 AAEQAVVAEA ETIVVKSGDS LWTLANEYEV EGGWTALYEA NKGAVSDAAV IYVGQELVLP QA 182





SEQ	ID	NO:	44	ggat	ccg	cac	cgc	cgc	ggt	aac	cct	ggt	cgc	cgc	gac	cgc	act	cgg	ggc	gac	cgg	cga	ag	60
SEQ	ID	NO:	45	I	R	T	A	A	V	T	L	V	A	A	T	A	L	G	A	T	G	E	A	
				cggt	age	cqc	gcc	cto	ggc	gcc	cct	gcg	cac	cga	ctg	gga	cgc	cat	cgc	cgc	gtg	cga	gt	120
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				s	G	N	W	Q	A	N	T	G	N	G	Y	Y	G	G	L	Q	F	A	R	
				ggt	ccac	rcto	gat	togo	cgc	cgg	cgc	cct	caa	igta	cgc	ccc	gcg	cgc	gga	cct	.cgc	cac	CC	240
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				gcg	acas	agca	agai	tcg	ccgt	tggo	gga	acc	jcct	.cgc	ccç	jtct	gca	rada	gat	gto	cgc	cto	19	299
																	Q							

F14. 2B

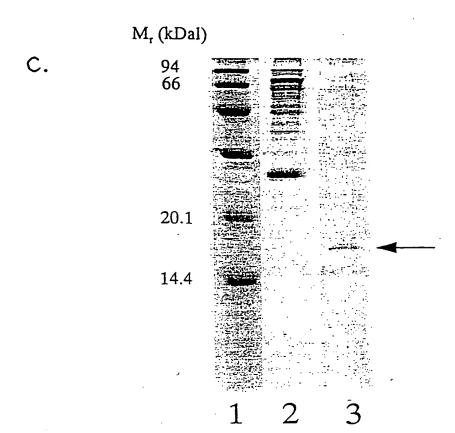
Fraction number





F14.3

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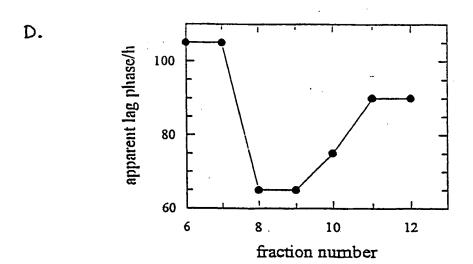
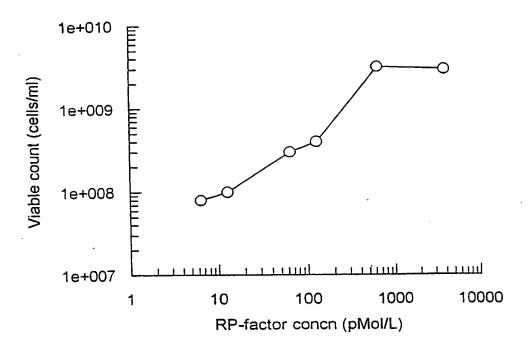


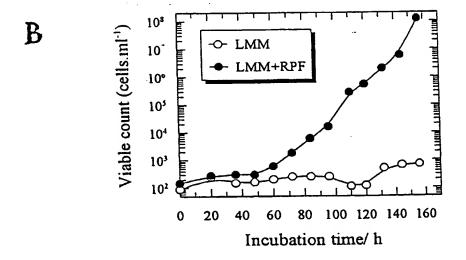




FIG. 4

A



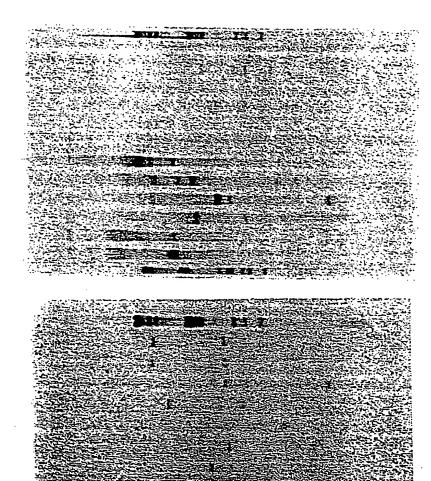


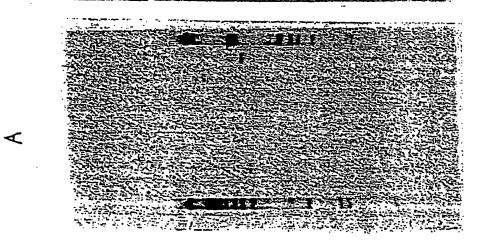


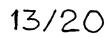


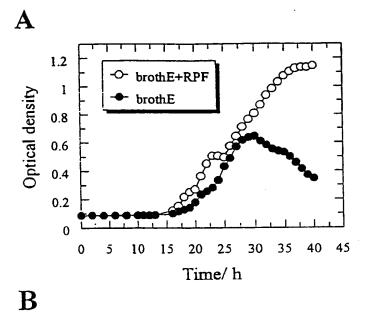
F14.5

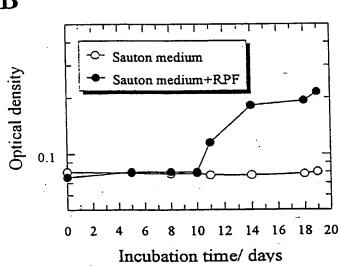
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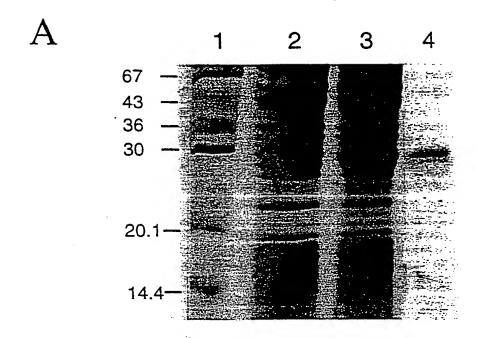
F14.6

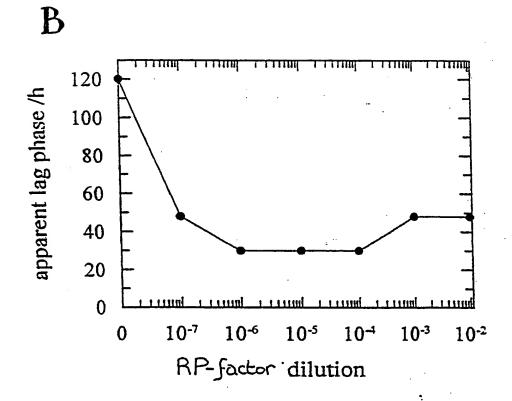




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FIG. 7









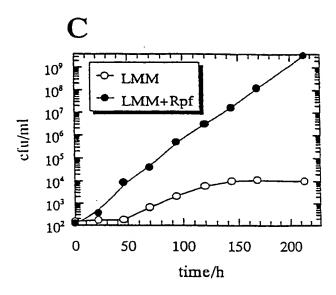


FIG. 7



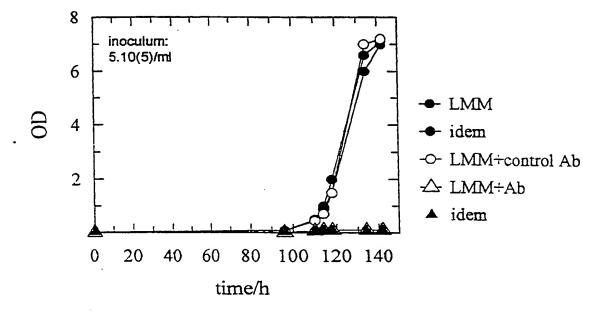
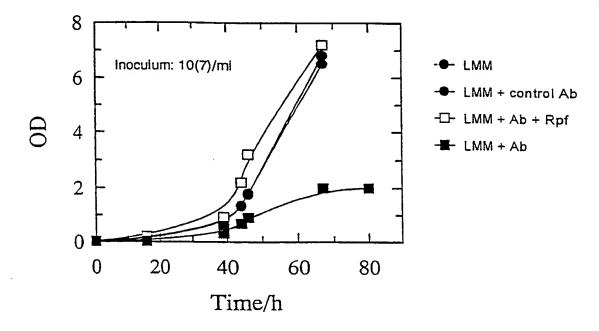


FIG. 8A





F19.8 B

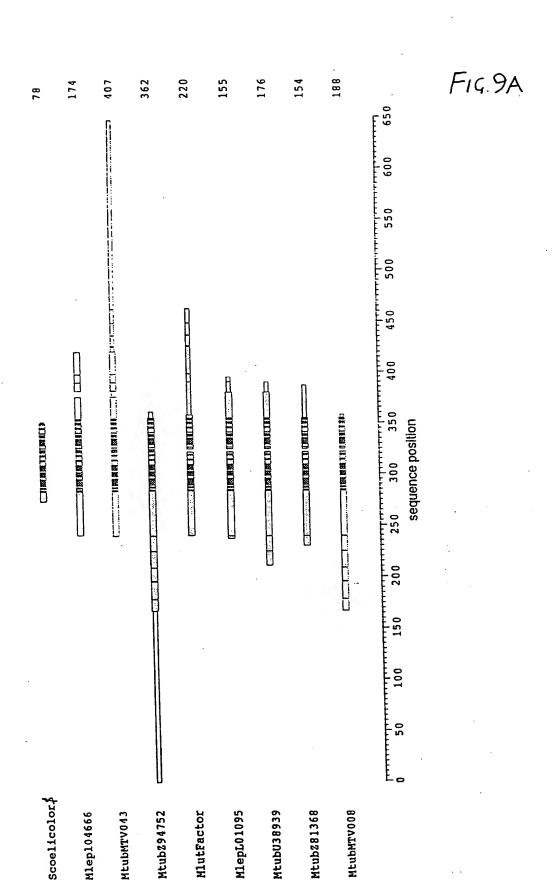






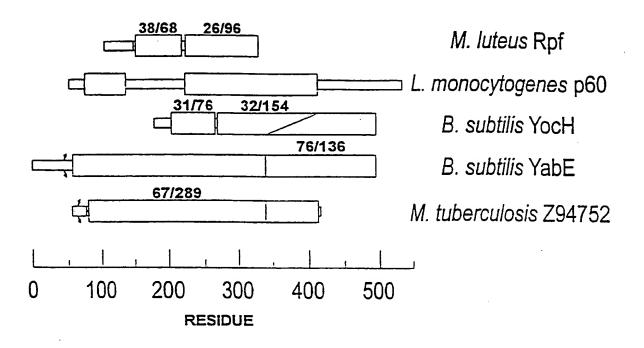


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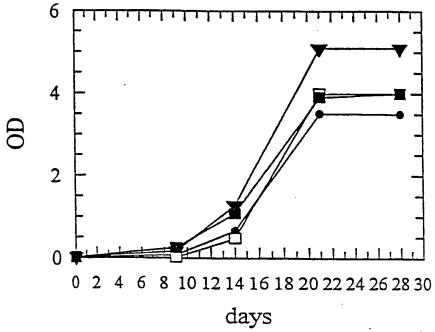




F19. 9B







F19.10

- Control
- **▼** Rpf(1:10000)
- -□- Rpf2 (1:10000)
- **■** Rpf2 (1:100000)